

WHAT IS CLAIMED IS:

1. A SDH signal channel pointer analyzing apparatus comprising:

channel information detection means for  
5 sequentially detecting pointer position information of channels inserted in a frame of an input SDH signal, and channel identification information for identifying the channel, as a set of channel information;

channel pointer extraction means for extracting  
10 channel pointer value inserted in said input SDH signal based on the pointer position information contained in said channel information, each time the channel information is detected by said channel information detection means;

15 a reference data memory for storing channel pointer value, pointer counter data and status data representing alarm states as a set of reference data for each channel, respectively in different address area for each channel;

20 reference data readout means for reading out the reference data of the channel specified by channel identification information contained in the channel information from said reference data memory, each time the channel information is detected by said channel  
25 information detection means;

pointer processing means for judging states of justification and alarm, from the channel pointer value

extracted from said channel pointer extraction means,  
and reference data read out by said reference data  
readout means and for generating a new reference data  
based on the judgment results; and

5           reference data update means for updating the  
reference data of the same channel stored in said  
reference data memory by the new reference data  
generated by said pointer processing means.

2. A SDH signal channel pointer analyzing  
10       apparatus according to claim 1, further comprising:  
a display means for displaying the results of  
judgment by said pointer processing means.

3. A SDH signal channel pointer analyzing method  
comprising the steps of:  
15       sequentially detecting pointer position  
information of channels inserted in a frame of an input  
SDH signal, and channel identification information for  
identifying the channel, as a set of channel  
information;

20       extracting channel pointer value inserted in said  
input SDH signal based on the pointer position  
information contained in said channel information, each  
time the channel information is detected;

25       storing channel pointer value, pointer counter  
data and status data representing alarm states as a set  
of reference data for each channel into a reference  
data memory, respectively in different address area for

each channel;

reading out the reference data of the channel  
specified by channel identification information  
contained in the channel information from said  
5 reference data memory, each time the channel  
information is detected;

judging states of justification and alarm, from  
the extracted channel pointer value, and reference data  
read out from said reference data memory and,  
10 generating a new reference data based on the judgment  
results; and

updating the reference data of the same channel  
stored in said reference data memory by the new  
reference data.

15 4. A SDH signal channel pointer analyzing method  
according to claim 3, further comprising the step of  
displaying said judgment results.